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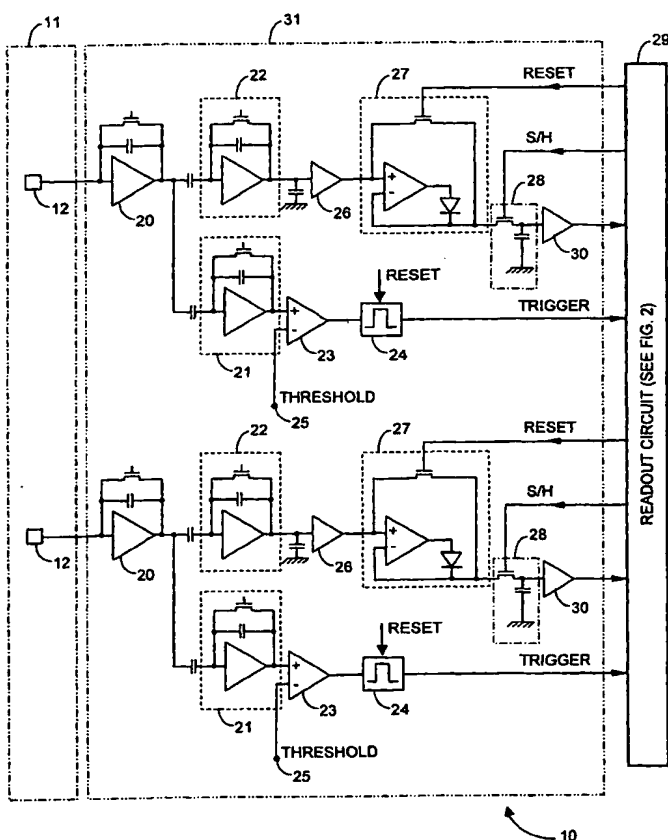
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(54) Title: READOUT CIRCUIT FOR AN ACTIVE PIXEL IMAGE SENSOR

(57) Abstract: A readout circuit (29) for reading active pixels in a sensor (10) having at least one sensor segment (11) each containing addressable pixels (12) includes a respective sample and hold unit (28) for sampling and holding an analog value associated with a corresponding pixel, and an analog multiplexer (35) in each segment having an addressable channel coupled to each sample and hold unit for carrying the corresponding held value of the respective pixel. A lookup table (38) stores addresses of predefined neighboring pixels associated with the respective pixel. An encoder (36) is responsive to one or more trigger signals for generating an address in the lookup table, and a controller (37) feeds the address to the lookup table and successively feeds the addresses of the predefined neighboring pixels output by the lookup table to the analog multiplexer.

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